IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1.(currently amended)   A method for transmitting data across a network comprising:

receiving packets of data;

combining the packets of data based on packet header destination information to form a first combined file;

compressing the first combined file to form a first compressed file; and

transmitting the first compressed file based upon any one of a plurality of different protocols in different network layers.

2.(original)   The method for transmitting data across a network according to claim 1, further comprising repacketizing the first compressed file, wherein the transmitting step transmits the repacketized first compressed file.

3.(original)   The method for transmitting data across a network according to claim 1, wherein the packets combined to form the first combined file have headers addressed to the same first subnetwork, the first subnetwork comprising a plurality of users.

4.(original)   The method for transmitting data across a network according to claim 3, further comprising inserting headers addressed to the first subnetwork on the packets of the repacketized first compressed file.

5.(original)   The method for transmitting data across a network according to claim 3, further comprising:

selecting a second group of packets of data with headers addressed to a second subnetwork;

combining the second group of packets of data to form a second combined file;

compressing the second combined file to form a second compressed file; and

transmitting the second compressed file.

6.(original)   The method for transmitting data across a network according to claim 5, further comprising repacketizing the second compressed file, wherein the transmitting step transmits the repacketized second compressed file.

7.(original)   The method for transmitting data across a network according to claim 6, further comprising inserting headers addressed to the second subnetwork on the packets of the repacketized second compressed file.

8.(original)   The method for transmitting data across a network according to claim 5, wherein the compressing steps compress the first combined file according to a first compression algorithm and compress the second combined file according to a second compression algorithm.

9.(original)   The method for transmitting data across a network according to claim 1, wherein the receiving step receives the packets of data from a third subnetwork.

10.(original) The method for transmitting data across a network according to claim 1, further comprising ignoring packets destined for at least one of the third subnetwork and a fourth subnetwork based on header destination information.

11.(currently amended)   A method for transmitting data across a network comprising:

receiving packets of data;

combining and compressing the packets of data destined for a first subnetwork according to a first compression algorithm to create a first compressed file; and

combining and compressing the packets of data destined for a second subnetwork according to a second compression algorithm to create a second compressed file, each said compressing step being based upon any one of a plurality of different protocols in different network layers.

12.(original) The method for transmitting data across a network according to claim 11, wherein the combining and compressing the packets of data destined for a first subnetwork step further comprises compressing the packets of data destined for the first subnetwork according to a first compression algorithm based upon first header destination information and the combining and compressing the packets of data destined for a second subnetwork step further comprises compressing the packets of data destined for the second subnetwork according to a second compression algorithm based upon second header destination information.

13.(original) The method for transmitting data across a network according to claim 11, further comprising:

       repacketizing the first compressed file;

       repacketizing the second compressed file; and

       transmitting the packets of the repacketized first compressed file and the packets of the repacketized second compressed file.

14.(original) The method for transmitting data across a network according to claim 11, further comprising ignoring packets destined for a third subnetwork based on third header destination information.

15.(currently amended)   An apparatus for transmitting data across a network comprising:

       an input that receives packets of data;

       a controller that combines packets of data based on packet header destination information to form a first combined file based upon any one of a plurality of different protocols in different network layers;

a first compressor that compresses the first combined file to form a first compressed file; and an output that outputs the first compressed file to the network.

16.(original) The apparatus for transmitting data according to claim 15, wherein the controller repacketizes the first compressed file and the interface outputs the repacketized compressed file to the network.

17.(original) The apparatus for transmitting data across a network according to claim 15, wherein the packets combined to form the first combined file have headers addressed to the same first subnetwork, the first subnetwork comprising a plurality of users.

18.(original) The apparatus for transmitting data across a network according to claim 17, wherein the controller inserts headers addressed to the first subnetwork on the packets of the repacketized first compressed file.

19.(original) The apparatus for transmitting data across a network according to claim 17, further comprising a second compressor, wherein the controller selects a second group of packets of data with headers addressed to a second subnetwork and combines the second group of packets of data to form a second combined file, the second compressor compresses the second combined file to form a second compressed file, and the output transmits the second compressed file.

20.(original) The apparatus for transmitting data across a network according to claim 19, wherein the controller repacketizes the second compressed file and the output transmits the repacketized second compressed file.

21.(original) The apparatus for transmitting data across a network according to claim 20, wherein the controller inserts headers addressed to the second subnetwork on the packets of the repacketized second compressed file.

22.(original) The apparatus for transmitting data across a network according to claim 19, wherein the first compressor compresses the first combined file according to a first compression algorithm and the second compressor compresses the second combined file according to a second compression algorithm.

23.(original) The apparatus for transmitting data across a network according to claim 15, wherein the input receives the packets of data from a third subnetwork.

24.(original) The apparatus for transmitting data across a network according to claim 15, wherein the controller ignores packets destined for at least one of the third subnetwork and a fourth subnetwork based on header destination information.

25.(original) An apparatus for transmitting data across a network comprising:

an input that receives packets of data; and

a controller that combines and compresses the packets of data destined for a first subnetwork according to a first compression algorithm to create a first compressed file, and combines and compresses the packets of data destined for a second subnetwork according to a second compression algorithm to create a second compressed file.

26.(currently amended) The apparatus for transmitting data across a network according to claim 25, wherein the controller further compresses the packets of data destined for the first subnetwork according to a first compression algorithm based upon first header destination information and compresses the packets of data destined for the second subnetwork according to a second compression algorithm based upon second header destination information, each said compression algorithm being based upon any one of a plurality of different protocols in different network layers.

27.(original) The apparatus for transmitting data across a network according to claim 25, wherein the controller repacketizes the first compressed file, repacketizes the second compressed file and transmits the packets of the repacketized first compressed file and the packets of the repacketized second compressed file.

28.(original) The apparatus for transmitting data across a network according to claim 25, wherein the controller ignores packets destined for a third subnetwork based on third header destination information.